

XVII. *Further additions to the Rev. T. A. Marshall's Catalogue of British Ichneumonidæ.* By JOHN B. BRIDGMAN, F.L.S.

[Read September 7th, 1887.]

THE additions to the Rev. T. A. Marshall's list of British *Ichneumonidæ* appear interminable; new species and species new to Britain are constantly occurring. Since my last paper Mr. G. C. Champion very kindly sent me a box of well-set ichneumons, most of which came from Aviemore, and contained several species new to our list. Professor C. G. Thomson has kindly examined my species of *Exochus*, and the species of *Ichneumon luctatorius* group, among which were several of his new species. I am also indebted to many other entomologists for insects sent to me.

Ichneumon rufidorsatus, n. s.

Mesothorace supra, scutello, abdominis basi, pedibusque rufis, coxis nigris; annulo antennarum rufo.

Head rather remotely punctate; punctures not deeply impressed; antennæ rather stout, slightly thickened between the middle and the apex, the latter attenuate, scarcely more than half the length of the body; 1st joint of flagellum almost twice as long as wide, 4th quadrate; head behind the eyes not narrow. Thorax scarcely narrower than the head; mesonotum somewhat shining, punctate, punctures not very close; scutellum shining, with scattered punctures; metathorax subopaque, very finely rugose, with three superior areæ; supero-medial area quadrate; costæ fine; spiracles almost linear. Abdomen scarcely wider than the head and thorax, elongate-ovate; 2nd, 3rd, and 4th segments almost the same width, transverse; the 1st segment almost smooth and shining, obsolete reticulate, with a few scattered punctures at the apex; remaining segments closely and finely punctate; the gastrocœli transverse, not deeply impressed, the space between them a little narrower than the middle area of the post-petiole; aculeus distinctly projecting beyond the 7th segment.

Areolet of wings open above, recurrent nervure received just beyond the middle; legs moderate.

Head black, mouth piceous, scape of antennæ black; 1st to 8th joints of flagellum fuscous; 9th to 11th reddish; the remainder black. Thorax black; collar above, mesonotum and scutellum red; tubercles and squamulæ reddish or piceous; 1st to 3rd segments of the abdomen red; 4th and 5th black; 6th and 7th reddish or fulvous. Legs red; coxæ black, front ones red beneath; trochanters black at the base; apical joint of tarsi fuscous. Stigma pale testaceous. Female. Length, 7 mm.

One female taken by Mr. G. C. Champion at Aviemore.

This appears to be undescribed; it comes very near to *I. picticollis*, Holm., but has differently-coloured legs.

Herpestomus distinctus, n. s.

Segmentis 2—3 pedibusque rufis, femoribus et tibiis posticis apice fuscis.

Head subopaque, not punctate, transverse, scarcely narrowed behind the eyes; clypeus distinctly separated from the face, apex widely rotundate; face transverse, rather prominent in the middle; antennæ scarcely half the length of the body, stout, somewhat clavate; 1st and 2nd joints of flagellum scarcely longer than wide, 3rd quadrate, remainder transverse. Mesonotum distinctly trilobed, with somewhat scattered punctures; scutellum flat, with scattered punctures; metathorax about as long as wide, obsoletely rugose; supero-medial area elongate, about one-third longer than wide, sides parallel, rounded in front, lateral area subdivided; postero-medial area very slightly depressed in the middle. Abdomen subopaque, obsoletely reticulate, covered with rather scattered short pubescence; aculeus just exerted; 1st segment somewhat irregularly and rather coarsely aciculate, apex shining; base of 2nd segment with a very shallow transverse impression, interrupted in the middle. Legs rather stout. Wings with the outer nervure of the areolet subobsolete; radial cell short, almost as broad as long.

Black, scape and two first joints of flagellum reddish; 8th and 9th joints show indications of pale marks; extreme apex of 1st and 4th segments of the abdomen reddish; 2nd and 3rd entirely red. Legs red; apical half of hind femora, apex and extreme base of hind tibiæ, and apical joint of hind tarsi, fuscous. Tegulæ piceous, stigma and nervures pale fuscous. Female. Length 5 mm.

One female was taken by Mr. G. C. Champion at Caterham.

This very distinct species is easily known from the two other species having the 1st segment aciculate; *flaviger* has the orbits, thorax, and scutellum yellow-marked; *striatus* has the antennæ longer, two-thirds the length of the body.

Phæogenes versutus, Wesm.

Wesm., Tent., 1844, 186, ♀.

Mr. G. C. Champion has taken a female *Phæogenes* at Mickleham, which I believe to be this species.

Hemiteles albomarginatus, n. s.

Niger; pedibus rufis basi nigris; segmentis 5—7 abdominis albomarginatis; aculeo dimidio abdominis longiore.

Shining; head wider than the thorax, transverse, very narrow behind the eyes towards the neck, almost free from punctures, slightly pubescent; antennæ about as long as the body, thin, almost filiform, rather thinner at the base than in the middle, apex slightly attenuated; 2nd and 3rd joints of the flagellum of equal length, nearly four times as long as wide. Thorax a little longer than high; mesonotum distinctly trilobed with somewhat scattered punctures, more sparingly punctured on the lateral lobes; scutellum gibbose, with scattered punctures; metathorax with five distinct areæ; costæ very prominent, rather coarsely rugose; supero-medial area about as long as wide, pentagonal. Abdomen elongate-ovate; apex of 2nd segment the widest (this is almost wider than the thorax); apex of 1st segment broad, about one-fourth longer than the width of the apex; spiracles not projecting, rugosely punctate, apex smooth; remaining segments transverse; 2nd and 3rd with a somewhat distinct transverse central depression, 2nd between the base and the depression rugosely punctate, 3rd shows indistinctly the same sculpture in the centre; aculeus about two-thirds the length of the abdomen. Wings with an imperfect pentagonal areolet, nervelet distinct, radial cell rather short; 3rd division of the costa one-third longer than the inner division of the radial nervure; transverse anal nervure slightly ante-furcal, divided one-third from bottom. Legs slender.

Black; incision of the 2nd segment of the abdomen faintly reddish; 5th to 7th with a distinct white apical margin. Legs red; coxæ, base of trochanters, and base of femora behind, more

or less black, hinder ones the most so; apical joints of the tarsi fuscous. Tegulæ and base of wings white; stigma fuscous, base pale; wings slightly fuscous. Female. Length nearly 5 mm.

One female taken by Mr. G. C. Champion at Box Hill.

Aptesis hemiptera, Gr., ♂.

Mr. J. J. Walker has fortunately bred both sexes of *A. hemiptera* from *Catoptria microgramma*, and I am indebted to Mr. G. C. Bignell for a pair of them. C. G. Thomson, in *Opuscula Ent.*, 993, 70, described an insect as the male of *A. hemiptera*, but it is evidently not the true male. He says the stigma at the base is not broadly white; in Mr. Walker's male the base is white, as in the female, and legs are differently coloured. It is like no male that I have seen any description of.

Head and thorax smooth and shining, with a few punctures very minute, and almost obsolete; head transverse, sides behind the eyes slightly sloping; antennæ filiform, about three-fourths the length of the body. Thorax short, about as long as high, as wide as the head, distinctly trilobed in front; metathorax short; supero-medial area subquadrate, smooth and shining; lateral area divided (these and posterior face, which is rather concave and subdivided by two perpendicular lines, rather finely rugose); posterior transverse costa terminating laterally in a short spine. Abdomen subovate, almost as wide as the thorax, rather longer than the head and thorax, apex of 3rd and base of 4th segments the widest part; post-petiole quadrate, twice as wide and one-third shorter than the petiole; spiracles not prominent; 1st and 2nd segments distinctly aciculate, 3rd obsolete so in the middle; abdomen covered with rather scattered pubescence; 2nd and remaining segments transverse. Legs rather slender; calcaria of hind tibiæ almost half as long as 1st tarsal joint. Wings with an imperfect pentagonal areolet; radial cell short and wide; posterior inferior angle of discoidal cell acute; transverse discoidal nervure divided below the middle, transverse anal subopposite, divided below the middle.

Black; 2nd and greater part of 3rd segments castaneous; front and middle legs pale chestnut; coxæ, base of trochanters, tarsi, and extreme apex of middle tibiæ, black; hind legs black; apex of trochanters, base of femora, and middle of tibiæ, red. Tegulæ piceous; stigma black, base white; wings smoky, with a sub-obsolete white blotch against the stigma, as in the female, but less distinct. Length, 5 mm.

Pezomachus sylvicola, Fst.

Fst., Mon. Gatt. Pez., 102, 27, ♀.

Mr. G. C. Champion has taken a female *Pezomachus*, which I believe to be this species. It differs only in one respect from Förster's description: he says, "aculeus scarcely as long as the 1st segment." Mr. Champion's insect has the aculeus about one-third the length of the 1st segment. I believe the aculeus varies in length in some species; in *P. Neesii* it varies very much. This insect looks a great deal like a very smooth and shining specimen of *P. zonatus*.

A single female was taken at Caterham.

Pezomachus Neesii, Fst., ? var.

I have seen amongst *Pezomachi* collected by Mr. Billups and Mr. Champion what I considered a small variety of *P. Neesii*, Fst., but on closer examination I find the differences constant; the aculeus projects rather more than is usual in *Neesii*, the 1st segment only of the abdomen is red, the remainder purplish brown with the incisions faintly reddish, the base of the antennæ generally darker, and flagellum with eighteen joints; whilst the genuine *P. Neesii*, with the partially red 2nd segment of the abdomen, always, as far as my observation goes, has twenty joints in the flagellum. I am inclined to think it is a good species and not a variety.

Pezomachus Debeyii, Fst.

Fst., Mon. Gatt. Pez., 110, 37, ♀.

Mr. Champion has taken a *Pezomachus* at Sheppy, which agrees with this species, except that it has the spiracles on the 1st segment slightly projecting.

Pezomachus æmulus, Fst.

Fst., Mon. Gatt. Pez., 146, 86, ♀.

In Mr. Champion's collection are two specimens of a *Pezomachus* which I believe to be this species; it differs from Förster's description in having the aculeus longer, which he says is scarcely longer than half of the 1st segment; these two have it almost as long as the

segment. Förster knew but one specimen. The apex of the abdomen in one of the two is brownish.

Sagaritis fasciata, n. s.

Segmentis mediis rufo-fasciatis, segmento tertio transverso, aculeo segmento primo longiore.

♀. Sides of head behind the eyes very slightly oblique; antennæ of female not more than half the length of the body; supero-medial area of metathorax about as long as wide, closed behind; lateral area subdivided. Post-petiole rather wider than long, about twice the width of the petiole, sides scarcely swollen, 2nd segment rather longer than wide, 3rd transverse, aculeus almost as long as one-third of the abdomen. Areolet of wings petiolated; recurrent nervure received just before the middle; transverse anal nervure not divided.

Black; palpi and mandibles fulvous-yellow; 1st segment of abdomen with a very narrow red margin, 2nd and 3rd with a broad apical red band, 4th obscurely red at the sides of the apical margin. Legs red, coxæ black; middle and hind trochanters black-marked at the base, yellowish at the apex; extreme base of femora yellowish; hind tibiæ white, apex and before the base dark; middle tibiæ slightly fuscous at the apex; base of 1st joint of hind tarsi pale, remainder fuscous, articulations slightly paler; middle tarsi the same, but the brown much paler; stigma piceous-yellow, tegulæ yellow.

♂. Differs only from the female in having the antennæ longer, supero-medial area of metathorax a little narrower and imperfectly closed behind, the 2nd and 3rd segments of the abdomen longer, the latter rather longer than wide, and the transverse anal nervure of hind wings obsoletely divided below the middle; the abdomen is more highly coloured, the apex of the 3rd segment has a dark mark in the middle, and the sides of the remainder are broadly red; the black at the apex of the hind tibiæ is more inclined to red. Male and female. Length, 6·5—7 mm.

I took two females and one male together at Horning Ferry, in June, 1882. They appear to me to be a distinct species; in some respects they agree with *S. maculipes*, Tschek., but differ in the length of the 3rd segment and the aculeus, which is longer than usual in this genus, and the colour of the abdomen; in length of aculeus it comes nearer to *S. Holmgreni*, Tschek., but the legs are differently coloured and the head wider.

Sagaritis maculipes, Tschek.

Tschek., Ichn. Frag., 49, 6, ♂ ♀.

I have taken in this neighbourhood what I believe to be this species; it has also been bred by Mr. W. H. B. Fletcher from an unknown host. The cocoon is pearly white, with two indistinct zones of scattered black dots.

Cymodusa antennator, Holm.

Holm., Mon. Tryp. Suec., 41, 4, ♂ ♀.

Dr. Capron has taken the female of this species at Shiere; he also takes a male *Cymodusa*, which I identified as *C. flavipes*, Brischke. This Dr. Capron thinks is the male of *C. antennator*, Holm. It may be so, but it differs in many respects from the female; the head is not so wide, the face is wider, hind femora dark, and there is no trace of red on the abdomen of any I have seen (I have four males). Holmgren gives a variety of the male, "abdomen black, except the substernaceous or red incision of 2nd segment, and hind femora entirely black"; this agrees exactly with Dr. Capron's males, and also a male which I took at Wimbledon. In a footnote Holmgren says that this variety is perhaps a distinct species. Dr. Capron remarks that he has taken no male of *C. antennator*, or female of *C. flavipes*; it is possible that these may be the sexes of the same insect.

Limneria mandibularis, Holm.

Holm., Mon. Ophion. Suec., 97, 76, ♂ ♀.

Dr. Capron has taken this very distinct species in the neighbourhood of Shiere. The head and thorax are very coarsely punctate, wings are without areolet, hind legs greater part black, aculeus and antennæ short, and transverse anal nervure divided, readily distinguishes it from the other species of this group of *Limneria*.

Limneria distincta, n. s.

Niger, metathorace excavato, pedibus posticis nigris tibiis basi et medio rufis.

Head transverse, scarcely contracted behind the eyes, rather wider than the thorax; antennæ not quite so long as the body;

face subquadrate, about the same width as the forehead. Thorax longer than high; mesonotum reticulate, with large close and rather shallow punctures; metanotum with a deep longitudinal furrow; lateral areæ subdivided; supero-medial area longer than broad, not closed behind, central groove is continuous from base to apex. Abdomen long and slender, more than one-third longer than the head and thorax, not so wide as the thorax; 1st segment longer than the hind coxæ and trochanters, petiole slender, about as long as the post-petiole, the latter rather more than twice as wide as the petiole, longer than broad, sides almost parallel; 2nd segment one-third longer than wide, 3rd quadrate, 4th, 5th, and 6th of equal length, one-third wider than long; abdomen pubescent at the sides and apex. Wings with a petiolated areolet; recurrent nervure received about in the middle of the areolet; external radial nervure almost straight; transverse anal nervure not divided.

Black; legs red, coxæ and trochanters black, middle femora with a black streak in the middle behind, hind legs black, tibiæ dull red, apex and before the base black, base of tarsal joints whitish, tarsi of middle legs the same colour, apex of middle tibiæ fuscous, calcaræ white. Stigma fuscous, base of wings and tegulæ yellow; mandibles and palpi yellow. Male. Length, 6 mm.

This appears to me to be a very distinct and undescribed species; the colour of the hind legs is different from any other of this group.

A single male was bred by Mr. W. H. B. Fletcher from *Gelechia lentiginosella* in July, 1886, taken in Abbott's Wood.

Dicolus subtiliventris, Fst.?

Fst., Ueb. d. Gatt. u. Art. d. Fam. d. Plectis., 96.

It is impossible to be sure that this is really Förster's species, because his description is so short: "Hind tibiæ distinctly notched before the apex, face dark brown, antennæ 31 joints, ♀"; all these points agree exactly with an insect taken by Mr. Bignell in the neighbourhood of Plymouth. Below I give a more detailed description of the insect:—

Head oblique behind the eyes; antennæ with long dense pubescence, a little longer than the body; head shining, very delicately punctured; clypeus small, semicircular, distinctly separated from

the face, the latter elevated in the middle. Thorax not so wide as the head, punctured as on the head, nearly three times as long as wide, not trilobed in front; metathorax with a transverse suture a little before the middle, without areae, superior surface separated from the posterior surface by a prominent costa. Abdomen about as wide as the thorax and longer than the head and thorax, and widest towards the apex; 1st segment long and slender, about four times as long as wide, spiracles placed before the middle, post-petiole very little wider than the petiole; 2nd and 3rd segments of equal length, longer than wide; 4th cylindrical, one-fourth longer than wide; remainder transverse; the 2nd has an oblong perpendicular depression (? is this normal), with a slightly-raised ridge in the middle; aculeus straight, slender, and scarcely projecting. Legs slender, hind coxæ long, hind tibiæ with a wide notch before the apex. Wings without an arcolet (very similar to *Hemiteles*); stigma moderate; external radial nervure curved, forming a slight S; transverse anal nervure of hind wings obsoletely divided just below the middle.

♀. Black; face partly piceous, antennæ reddish, paler beneath, palpi whitish, mouth and clypeus fulvous, thorax above partly piceous, prothorax at the sides and beneath, mesopleura and breast, fulvous-red; abdomen fusco-piceous; extreme apex of 2nd, all the 3rd, and middle of the base of the 4th segments stramineous, the 3rd fuscous at the sides; legs pale fulvous; front and middle coxæ and trochanters pale straw; hind coxæ with a slight fuscous mark on the outside towards the apex; apex of hind femora and tibiæ with a slight fuscous stain; base of wings and squamulæ stramineous. Stigma palish fuscous. Length about 5 mm.

Catoglyptus crassipes, Holm.

Holm., Mon. Tryph. Suec., 107, ♂ ♀.

Mr. Champion has taken a male of this species in the London district.

Catoglyptus pulchricornis, Holm.

Holm., Mon. Tryph. Suec., 109, 7, ♀.

Dr. Capron has taken two males of this species in the neighbourhood of Shiere: he says they differ from the female in having the antennæ entirely black, the legs rather darker, and the posterior coxæ entirely black. In one specimen the clypeus and face are yellowish white; in the other, a much smaller specimen, the inner orbits

only have a broad yellowish streak: the abdomen has the peculiar rugosity of the female.

Catoglyptus fuscicornis, Gmel.

Dr. Capron says that *Euryproctus* (*Mesoleptus*, Curt.) *Waltoni*, which he takes in the neighbourhood of Shiere, is the male of *C. fuscicornis*.

Perilissus minutus, n. s.

Niger, pedibus pallidis, coxis posticis nigris, scapo flavo, facie flavo-maculata ♀; facie genis et temporibus, thorace flavo-maculato ♂.

Head subopaque, sides slightly oblique behind the eyes, rather more so in the male than in the female; antennæ as long as the body. Thorax subopaque, very finely and closely punctate; mesonotum trilobed; supero-medial area of metathorax somewhat triangular, longer than wide, closed behind; lateral areæ obsoletely subdivided. Abdomen subopaque; 1st segment of female slightly rounded at the sides, tapering from base to apex, one-third longer than the width of the apex, spiracles almost in the middle and not distinct; 1st segment of the male much narrower, only about twice as wide at the apex as at the base, spiracles very prominent; both with a shallow furrow on the post-petiole; remaining segments transverse, the 4th the widest; aculeus slightly projecting and quite straight; legs rather slender. Wings with a large areolet, as in *Mesochorus*; recurrent nervure received before the middle; external radial nervure slightly curved; transverse anal nervure of hinder wings divided hardly below the middle, subopposite.

Black; palpi and greater part of mandibles yellow, frontal orbits yellow, and a fulvous blotch behind the eyes in the female; male mouth, face, frontal orbits, and cheeks yellow; scape yellow, black above in the female, base of flagellum beneath, remainder fuscous. Thorax of female black; in the male a yellow spot on the lower part of the prothorax, and another on the front part of the mesopleura; a line below the wings and front sutures reddish. Abdomen of the female, incisions of three first segments fulvous at the sides, wider and continued across the back in the male. Legs pale yellowish red; coxæ black; front coxæ yellow, base black; apex of middle pair yellowish (female); male almost entirely yellow, as well as extreme apex of hinder pair; trochanters yellow, hind pair of female reddish; hind tibiæ reddish white,

apex fuscous; apical joint of front and middle tarsi fuscous; hind tarsi fuscous, base of joints palish. Stigma pale fuscous; tubercles and tegulæ whitish. Male and female. Length, 5 mm.

Taken by Dr. Capron in the neighbourhood of Shiere. This species appears to come very near *P. nigricollis*, Thom., but the description is far too short to be certain: he makes no mention of the pale scape, partly black coxæ, or the reddish mark behind the eyes of the female.

Mesoleius attenuatus, n. s.

Niger, abdominis medio rufo, pedibus maxima ex parte rufis.

Head transverse, behind the eyes slightly oblique; antennæ filiform, longer than the body; apex of clypeus subtruncate. Thorax about one-third longer than high; mesonotum distinctly trilobed; metathorax without areæ; mesopleura scabriculous and dull, disc smooth and shining. Abdomen elongate, slender, longer than the head and thorax; apex of 4th segment the widest, nearly as wide as the thorax; 1st segment rather longer than the hind coxæ, petiole slender, sides parallel, about twice as long as wide; post-petiole rather longer than the petiole, apex very little wider than the petiole, finely scabriculous, apex shining, without canalicula, spiracles placed before the middle; 2nd segment very finely scabriculous, about one-third longer than wide; 3rd, sculpture the same, longer than wide, about the same length as the 2nd; remainder transverse. Legs slender; last two joints of hind tarsi of almost equal length. Wings with an areolet; transverse anal nervure divided in the middle.

Black; face, mandibles, clypeus, and scape beneath yellow; segments 2—4 of abdomen red; tubercles and tegulæ yellow; stigma pale testaceous. Legs red; coxæ black, extreme apex of front and middle ones yellow; trochanters yellow, base of hind pair black; extreme apex of hind femora dark; hind tarsi and apical one-third of hind tibiæ nigro-fuscous. Ventral fold pale. Male. Length, 8 mm.

One male taken by Mr. E. Brunetti, who very kindly gave me the insect; it belongs to Sect. A of *Mesoleptus* of Holmgren's Mon. Tryph. Suec., which division he afterwards placed in the genus *Mesoleius* (Disp. Syn. Mesol. Scand.), and is very distinct from any of the group.

Mesoleius (Saotus) ? brevispina, Thom.

Thom., Ent. Opus., 934.

Mr. J. E. Fletcher has bred several male Tryphons which agree better with this species than any other I can find; it is very similar to *Perilissus bicolor*, Brischke, but the teeth of the mandibles being of equal length will not allow it to go into that genus. The only difference that I can see from Thomson's description is that the calcaria of the tibiae are a trifle longer than one-third of the 1st joint of the tarsi. His descriptions are so very meagre that one can never be quite certain: in this he does not say if he knows the male. This group of *Mesoleius* have the abdomen more compressed and glazed than usual; some of the females are as much compressed as *Bassus cognatus*. I give a description of this insect:—

Head transverse, narrow behind the eyes; antennæ about as long as the body; apex of clypeus truncate, depressed, transversely raised before the apex. Thorax shining, parapsides obsolete; mesopleura obsoletely reticulate; supero- and postero-medial areae subdistinct. Side of post-petiole of abdomen almost parallel longer than wide, depressed in the middle, basal depression obsoletely continued on to the post-petiole; 2nd and 3rd segments longer than wide, from the second segment abdomen subcompressed. Legs moderate. Wings without an areolet; transverse anal nervure slightly ante-furcal, divided far below the middle; transverse ordinary not interstitial.

Black; face, frontal orbits, the lower part of prothorax, mesopleura and breast, large hook-shaped marks on shoulders, a double mark in centre of mesonotum, tubercles, tegulae, a mark below the wings, scutellum, or middle of scutellum, extreme apex of 1st segment, apex broadly of 2nd, a dorsal mark on 3rd margin of the remainder thinly, belly, front leg, hind coxæ, and trochanters yellow; hind femora red; base of hind tibiae dirty white, apical half and hind tarsi fuscous; stigma fuscous. Antennæ fuscous above, reddish beneath. The pale marks on the abdomen vary a little in quantity. Male. Length, 5 mm.

Bred by Mr. J. E. Fletcher from *Nematus purpuræ*, Cam., a new leaf-rolling sawfly, discovered by him at Worcester on *Salix purpurea*, June, 1886.

Mesoleius flavopictus, Gr.

Mesoleptus flavopictus, Grav., I. E., ii., 33, ♂; *Mesoleius*,
Bris., D. Ich. d. Prov. W. u. O-Preuss, ♂ ♀.

Mr. Champion has taken, at Caterham, a female which agrees exactly with Gravenhorst's male, except that the hind coxæ are entirely red. It differs slightly from Briselike's description: he says all the coxæ are red, the supero-medial area of the metathorax indistinct, and transverse anal nervure divided in the middle. Mr. Champion's insect has the supero-medial area rather distinct, elongate, with almost parallel sides, and transverse anal nervure divided a little below the middle; but this is of very little consequence, as all these points are subject to variation. Mr. Marshall has placed *flavopictus* in the genus *Perilissus*.

Grypocentrus cinctellus, Ruthe.

Ruthe, Stett. ent. Zeit., xvi., 54, 1; Holm., Mon. Tryph. Suec., 193. ♀.

Dr. Capron has taken this species in the neighbourhood of Shiere.

Thymarus compressus, Thom.

Thom., Opus. Ent., 909, ♂ ♀.

Dr. Capron informs me he has taken this species in the neighbourhood of Shiere.

Lathrolestus macropygus, Holm.

Perilissus macropygus, Holm., Mon. Tryph. Suec., 126,
12, ♂; *Lathrolestus macropygus*, Thom., Opus.
Ent., 917, ♂ ♀.

This handsome little insect has been taken by Mr. Champion at Aviemore; the female, which Thomson says is *Perilissus solcatus*, Holm., has not yet been taken in Britain that I know of. *L. macropygus* has since been taken by Dr. Capron in the neighbourhood of Shiere.

Polyblastus sanguinatorius, Ratz.

Ratz., Die Ichn. d. Forst., iii., 129, 51; Holm., Mon. Tryph. Suec., 213, ♀; Brischke, D. Ich. d. Prov. W. u. O-Preuss, 65, ♂ ♀.

Mr. W. H. B. Fletcher has bred a specimen of this lovely little *Tryphon* from an unknown host. Ratzeburg says that Brischke bred a male from *Cladius eucera*; Brischke says that it was bred from *Cladius viminalis* and *Nematus* larvæ. The *Tryphonidæ* frequently infest sawfly larvæ, and in all probability Mr. Fletcher introduced the larva of a *Cladius* or *Nematus* with the food-plant into his case.

Cteniscus gnathoxanthus, Gr.

Tryphon gnathoxanthus, Gr., Ich. Eur., ii., 147, 94, ♀;
Cteniscus gnathoxanthus, Holm., Mon. Tryph. Suec., 231, 12, ♂, ♀.

Mr. Bignell has taken a female of this very distinct species in Devonshire.

Triclistus (Exochus) Holmgreni, Bohm.

Holm., Disp. Met. Exoch. Scand., 57, 1, ♀.

Dr. Capron has sent me this insect, which he has taken at Shiere. Holmgren says it is very rare.

Triclistus lativentris, Thom.

Thom., Deuts. Entom. Zeits., xxxi. (1887), 203, 3, ♂ ♀.

A single specimen of this was bred in May, 1884, from *Emmlesia alchemillata* by Mr. W. H. B. Fletcher.

Triclistus nitifrons, Thom.

Thom., l. c., 204, 6, ♂ ♀.

This I took on Mousehold, near Norwich, in August, 1877, and had considered it *T. congener*.

Triclistus pubiventris, Thom.

Thom., l. c., 205, 8, ♂ ♀.

Taken at Earlham, near Norwich, in June, 1878. This I considered *T. podagricus*.

Exochus niger, mihi.

Trans. Ent. Soc. Lond., 1883, 169.

Thomson says this is a *Triclistus*, although the wings have no areolet.

Exochus Woldstedtii, Holm.

I have taken the male of this insect at Earlham, in the neighbourhood of Norwich, in June, 1886.

Exochus nigripalpis, Thom.

This species is common in this country. I had considered it *E. graripes*, but Thomson says it is his *nigripalpis*.

Exochus procerus, Holm.

Holm., Meth. Exoch. Scand., 68, 11, ♂ ♀.

I have a specimen of this insect: unfortunately it has no locality or number to it, so I am unable to say from whom I received it; all I can say is that it is British.

Bassus deplanatus, Gr.

Mr. G. C. Champion has taken a male *Bassus* at Aviemore which agrees very closely with *B. deplanatus*, Gr., but Gravenhorst says that the scape of the antennæ is red or ferruginous, towards the apex brownish or blackish, and the front coxæ black, more or less red beneath. In Mr. Champion's specimen the former are entirely black, and the latter entirely red. Holmgren gives the same description, and says the transverse anal nervure is divided a little above the middle; in the Scotch specimen it is divided in the middle. It is larger, measuring 8 mm.; Holmgren and Gravenhorst give the length $2\frac{1}{2}$ —3 or almost 3 lines. It is probably only a large var. of the *B. deplanatus*, Gr.

Bassus punctatus, n. s.

Niger, pedibus rufis basi nigris, posticis tarsis et tibiis apice nigris, scutello flavo limbato; areola nulla.

Subopaque; head transverse, rather narrowed behind the eyes, finely punctate, interstices reticulate; antennæ about two-thirds the length of the body. Thorax punctate, interstices reticulate

metathorax without areæ. First three segments of abdomen punctate, interstices reticulate; apex of 3rd free from punctures; base of 4th punctate, the remainder reticulate; 1st segment a little longer than wide, sides almost parallel; 2nd transverse. Legs moderate. Wings without an areolet; transverse anal nervure divided a little below the middle.

Black; a yellow mark in middle of the face, an oblong mark in front of wings, a streak below, sides and extreme apex of scutellum yellow. Legs red; coxæ, base of trochanters, apex of hind tibiæ and hind tarsi black; apical joint of front and middle tarsi fuscous. Tegulæ and base of wings yellow; stigma fuscous, extreme base slightly paler. Female. Length, 7.5 mm.

One female taken by Mr. G. C. Champion at Aviemore. This *Bassus* appears to be undescribed; the colour of the scutellum and coxæ, as well as the sculpture of the base of the abdomen, is distinct from any I can find described.

Ephialtes ruficollis, Desvig.

Desvig., Mus. Cat. Brit. Ichm., 88, 11.

The Rev. T. A. Marshall has placed this insect in his catalogue as a synonym of *Thalessa clavata*, F., but this is a mistake; it is a true *Ephialtes*. I have a male and female bred by Mr. C. G. Barrett many years ago. The transverse ordinary nervure is interstitial, and the transverse anal almost opposite and divided in the middle; the male has a narrow testaceous band at the base of the 2nd and 3rd segments.

If *Thalessa clavata* is included in the catalogue on the strength of Desvignes' insect, then it must be removed from the British list.

Pimpla nigricans, Thom.

Thom., Opusc. Ent., 754, 23, ♂ ♀.

Mr. Champion has taken, at Box Hill, a *Pimpla* which I believe to be this species. Thomson says it differs from *P. detrita*, Holm., in having the tubercles black, and the 5th joint of the tarsi not longer than the 3rd; besides these points the 1st segment of the abdomen is a little shorter and the aculeus a little longer.

Polysphincta gracilis, Holm.

Holm., Mon. Pimp. Suec., 32, 8, ♂ ♀.

Mr. Champion has taken a female of this very distinct species at Aviemore.

Polysphincta subrufa, n. s.

Niger, thorace subtus pedibusque rufis, tibiis posticis fuscis variis; aculeo segmento primo longitudine.

Shining; antennæ rather more than three-fourths the length of the body; head moderately narrowed behind; mesonotum obsoletely trilobed in front; metathorax with three distinct superior areæ; 1st segment of abdomen about as long as the width of the apex, keels distinct, extending to beyond the middle of the segment, this and the 2nd obsoletely scabriculous; 2nd and 3rd segments with a transverse impression; the remaining segments smooth and shining; aculeus as long as the 1st segment (about one-fifth the length of the abdomen), and stout. Radial cell of wings lanceolate, one-third longer than the internal division of the radial nervure; transverse anal nervure divided a little below the middle, the emitting nervure not very distinct.

Black; clypeus and mandibles dirty white, apex of latter brownish; the lower half of the mesopleura, metathorax beneath, breast, and legs red; base of hind tibiæ paler, apex and before the base fuscous; apex of middle tibiæ and apex of joints of middle and hind tarsi fuscous, their last joints entirely so. Stigma palish brown, base pale; tegulæ yellowish white. Length about 6 mm.

One female taken by Mr. G. C. Champion at Aviemore, and another by Mr. E. A. Atmore at Lynn in June, 1887.

This beautiful insect belongs to Holmgren's division A. b. †, but differs in colour and structure from any *Polysphincta* I can find described. It seems to me to come nearest to *P. percontatoria*, Müll.

Glypta clongata, Holm.

Holm., Mon. Pimp. Suec., 38, 6, ♀.

I took a female of this species at Brundall in July, 1881. Last year Mr. W. H. B. Fletcher bred it from the larvæ of *Bactra lanceolana* from Worthing, in July; it is very like *G. fronticornis*, but the head behind the

eyes does not slope towards the neck. It appears to vary in colour; the single male Mr. Fletcher bred has the margins only of the abdominal segments obscurely red, the coxæ reddish brown, apex of hind femora, base and apex of hind tibiæ, and apex of tarsal joints, brownish. The abdomen of the female also varies in colour to almost entirely black: one has the coxæ reddish brown. *G. fronticornis* I have not yet seen: either agree very well with Gravenhorst's description of *G. fronticornis*.

Glypta rufata, n. s.

Abdomine rufo apice infuscato, pedibus rufis, aculeo abdominis longitudine.

Shining, punctate; head transverse, narrow behind the eyes; antennæ three-fourths the length of the body; mesonotum slightly trilobed in front; metanotum shining, transversely rugose, with five more or less distinct areæ; mesopleura shining, punctate, punctures very much scattered behind; 1st segment of abdomen rather longer than wide, keels distinct for two-thirds the length of the segment, obsolete towards the apex; 2nd and 3rd segments about one-fourth broader than long; aculeus scarcely shorter than the abdomen. Wings without an areolet; transverse anal nervure divided below the middle, one-third from the bottom. Claws of tarsi pectinated.

Black; apex of clypeus and palpi piceous; flagellum beneath red. Abdomen red; apical segments more or less fuscous; the others usually with transverse fuscous stains, generally faint. Legs red; hind tibiæ at the apex and before the base slightly fuscous; apex of joints of hind tarsi fuscous, more or less intense. Stigma of female pale, male pale fuscous, squamulæ red; base of wings yellow. Male and female. Length, 5—6 mm.

Bred by Mr. W. H. B. Fletcher from *Eupæcilia notulana* from Wicken Fen, in June, 1886.

This very distinct species, in coloration, is somewhat like *G. monoceros*, but the forehead is not *cornuted*, the legs are differently coloured, and the claws pectinated.

Lissonota formosa, n. s.

Niger; thorace rufo-flavoque maculato, aculeo corpore paulo brevior, pedibus rufis.

Head transverse, behind the eyes oblique, but less so than in *L. variabilis*; antennæ not so long as the body. Thorax punctate;

mesonotum more finely punctate than the metanotum, and a little more coarsely so than in *variabilis*; punctures less distinct than on the latter, with a rather distinct central depression; 1st segment of abdomen about one-third longer than wide; 2nd and 3rd longer than wide; these three segments rather strongly punctate, the apical margins shining; 4th more finely punctate; aculeus about as long as thorax and abdomen. Wings as in *L. variabilis*.

Black; mouth, clypeus, and inner orbits yellow; mesothorax entirely; scutellum, back part of prothorax and sides of metathorax, red; a line on the upper part of the prothorax, a line at the sides above the front coxæ, a triangular mark on the shoulders and tubercles, yellow. Apical margins of 1st—3rd and sides of 3rd—7th segments of the abdomen castaneous. Legs red; front and middle coxæ and trochanters yellow; hind trochanters fuscous above; middle and hind tarsi slightly fuscous. Base of wings and tegulæ pale yellow; stigma pale testaceous. Length, 5 mm.

One female was bred in 1886 by Mr. G. T. Porritt from either *Rhodophæa consociella* or *Nephoptyx genistella*.

This insect is very like *variabilis* and *lateralis*, but differs from both beside in the rich coloration, from the former in the punctate abdomen, and from the latter in the longer 2nd and 3rd segments of the abdomen.

Echthrus lancifer, Gr.

Gr., I. E., iii., 867, 22, ♀; Taschen., D. Schluf. Pimp., 303, 2, ♀; Brischke, D. Ich. d. Prov. W. u. O-Preuss, 1880, 21, ♂ ♀.

Mr. Billups took a fine female at Walmer, August 5th, 1886, which he very kindly presented to me.

Echthrus nuberculatus, Gr.

Gr., I. E., iii., 866, 20, ♂ ♀.

Mr. G. C. Champion has taken a female of this species at Aviemore. The head, thorax, and abdomen are closely and coarsely punctate.